

## IMAGE READING APPARATUS

### ABSTRACT OF THE DISCLOSURE

An image reading apparatus for reading an image using a monochrome image sensor and a color image sensor having three shift registers which requires a reduced manufacturing cost and is less affected by the influence of external noises. The image reading apparatus comprises an analog frontend IC with three channels and having programmable gain amplifiers (PGA) for the respective channels capable of adjusting gains, an analog/digital converter (ADC) and a multiplexer (MUX) for sequentially providing signals amplified by the respective PGAs to the analog/digital converter built-in. The image reading apparatus amplifies pixel signals output from the respective channels of the monochrome image sensor or the color image sensor by providing the pixel signals to the corresponding PGAs, and converts the amplified pixel signals into pixel data through the analog/digital converter.